

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION  
International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

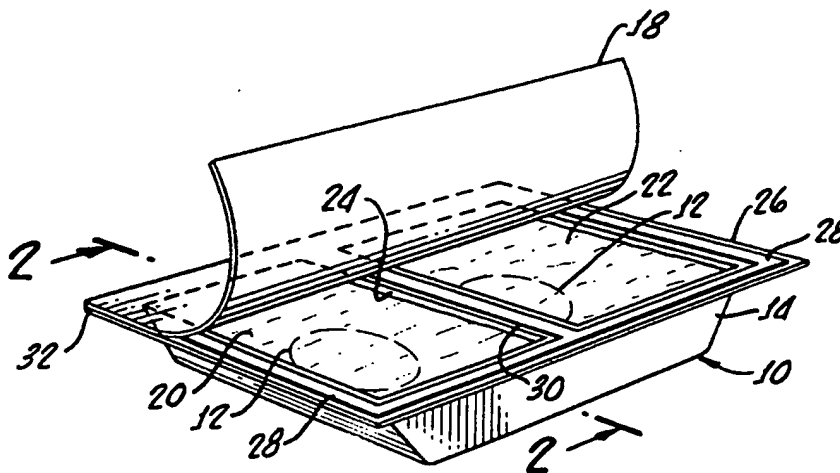
(51) International Patent Classification <sup>5</sup> : B65D 77/20, A45C 11/00		A2	(11) International Publication Number: WO 94/24019
			(43) International Publication Date: 27 October 1994 (27.10.94)
(21) International Application Number: PCT/US94/04391		(81) Designated States: AU, CA, JP, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).	
(22) International Filing Date: 21 April 1994 (21.04.94)			
(30) Priority Data: 08/052,053 21 April 1993 (21.04.93) US 08/057,933 7 May 1993 (07.05.93) US		Published Without international search report and to be republished upon receipt of that report.	
(71) Applicant: ALLERGAN, INC. [US/US]; 2525 Dupont Drive, P.O. Box 19534, Irvine, CA 92713-9534 (US).			
(72) Inventors: TAYLOR, Christy; 133 Stone Cliffe Aisle, Irvine, CA 92715 (US). EWART, William, J.; 22 Ellis Farm Close, Mayford Woking, Surrey GU22 9QN (GB). GRAU, Laurie, C.; 7891 Glencoe, #1, Huntington Beach, CA 92647 (US).			
(74) Agents: VOET, Martin, A. et al.; Allergan, Inc., 2525 Dupont Drive, P.O. Box 19534, Irvine, CA 92713-9534 (US).			

(54) Title: CONTACT LENS CONTAINERS AND METHODS OF USING

(57) Abstract

A container (10) is provided for holding contact lenses (12) in contact lens treatment solutions which has a base member (14) equipped with at least one compartment (20, 22). Each compartment has a predetermined length and width situated in a juxtaposed position with a partition (24) therein between for holding the contact lens and a laterally projecting flange (26) around the perimeter of the compartment. Each compartment is filled with a contact lens treatment solution. A layer of

adhesive (28) is deposited on the laterally projecting flange. A cover sheet member (18) extending at least across the full length and width of the compartment is releasably united to the base member at the flange by the layer of adhesive forming a fluid-tight seal. The layer of adhesive is capable of uniting the cover sheet member and the base member at the flange and forming a fluid-tight seal after repeated uniting and releasing between the two members. A resealable contact lens pouch (60) prefilled with a contact lens care solution (64) is also provided that is used for one time only to clean, disinfect, store and rinse a contact lens.



**FOR THE PURPOSES OF INFORMATION ONLY**

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AT	Austria	GB	United Kingdom	MR	Mauritania
AU	Australia	GE	Georgia	MW	Malawi
BB	Barbados	GN	Guinea	NE	Niger
BE	Belgium	GR	Greece	NL	Netherlands
BF	Burkina Faso	HU	Hungary	NO	Norway
BG	Bulgaria	IE	Ireland	NZ	New Zealand
BJ	Benin	IT	Italy	PL	Poland
BR	Brazil	JP	Japan	PT	Portugal
BY	Belarus	KE	Kenya	RO	Romania
CA	Canada	KG	Kyrgyzstan	RU	Russian Federation
CF	Central African Republic	KP	Democratic People's Republic of Korea	SD	Sudan
CG	Congo	KR	Republic of Korea	SE	Sweden
CH	Switzerland	KZ	Kazakhstan	SI	Slovenia
CI	Côte d'Ivoire	LI	Liechtenstein	SK	Slovakia
CM	Cameroon	LK	Sri Lanka	SN	Senegal
CN	China	LU	Luxembourg	TD	Chad
CS	Czechoslovakia	LV	Latvia	TG	Togo
CZ	Czech Republic	MC	Monaco	TJ	Tajikistan
DE	Germany	MD	Republic of Moldova	TT	Trinidad and Tobago
DK	Denmark	MG	Madagascar	UA	Ukraine
ES	Spain	ML	Mali	US	United States of America
FI	Finland	MN	Mongolia	UZ	Uzbekistan
FR	France			VN	Viet Nam
GA	Gabon				

**CONTACT LENS CONTAINERS AND METHODS OF USING****Field of the Invention**

5 This invention generally relates to improved contact lens containers and methods for their use. The present invention pertains to contact lens containers prefilled with contact lens treatment solutions. More particularly, the invention relates to a ready-to-use recloseable and resealable contact lens container for holding contact lenses and contact lens treatment solutions that can be used to clean, disinfect, and rinse contact lenses either one time or  
10 several times before being discarded.

The present invention also relates to a contact lens pouch prefilled with a contact lens care solution, and more particularly relates to a resealable/disposable contact lens pouch prefilled with a contact lens care solution that is used to clean, store, disinfect and rinse a contact lens.

15 **Background of the Invention**

In the care of contact lenses of various kinds, i.e., soft, hard, gas permeable, etc., a sterile environment is required where the lens can be disinfected and/or stored. This sterile environment usually means soaking the contact lens in a disinfecting or sterile solution. This is especially important in  
20 the care of soft contact lenses made of hydrophilic polymeric materials. These soft hydrophilic lenses require regular disinfecting. Additionally, when not in the eye they need to be stored in either a disinfecting solution or sterile saline solution in order to maintain their hydrated state. It is desirable for the contact lens wearer to have a readily accessible container for the safe  
25 disinfection and/or storage of the contact lenses.

Various designs of contact lens containers have been disclosed by others. For instance, U.S. Patent No. 5,053,208 to Seamons, et al. discloses a contact lens disinfecting kit having an open-top lens container, an elongated piercer mounted in the lens container in an upright position such that the  
30 piercer divides the interior of the lens container into two separate contact lens receiving ports. The Seamons, et al. device requires elaborate effort of piercing the compartment before using the container and moreover, it does not have a resealable top.

U.S. Patent No. 4,691,820 to Martinez discloses a molded blister  
35 package for storing and dispensing a hydrophilic contact lens having a base

- 2 -

portion which includes a cavity surrounded by an outstanding flange and a sheet cover sealed to the flange to enclose the cavity. The Martinez package is mainly used for shipping and dispensing contact lenses and is not amenable to reclosure once the package is opened and sterility lost.

5           Numerous other patents were issued on permanent contact lens containers, for instance, U.S. Patent No. 5,131,532 to Ives, U.S. Patent No. 4,578,566 to Bowen, and U.S. Patent No. 4,743,738 to Ryder, et al. These permanent contact lens containers are equipped with heating devices and therefore are not disposable.

10           It is also desirable for the contact lens wearer to have a readily accessible container for the safekeeping of contact lenses in a ready-to-wear condition.

          It is therefore an object of the present invention to provide a contact lens container for holding contact lenses and contact lens treatment solutions  
15           that is readily accessible and can be carried around by the contact lens wearer.

          It is another object of the present invention to provide a container for holding contact lenses and contact lens treatment solutions that is readily accessible and is reusable.

20           It is a further object of the present invention to provide a container for contact lenses that is prefilled with contact lens treatment solutions that can be easily used by the contact lens wearer to clean, disinfect, and store contact lenses.

          It is yet another object of the present invention to provide a container  
25           prefilled with contact lens treatment solutions equipped with a recloseable and resealable top such that the container may be used once or may be used several times.

          It is still further object of the present invention to provide a container prefilled with contact lens treatment solutions to be used by a contact lens  
30           wearer for the cleaning, disinfecting, and storing of contact lenses and then discarded after one use or several uses.

          It is an additional object of the present invention to provide a contact lens pouch prefilled with a contact lens care solution for the cleaning and  
35           storing of a contact lens that does not have the drawbacks and shortcomings of the prior art contact lens containers.

- 3 -

It is a further object of the present invention to provide a contact lens pouch prefilled with a contact lens care solution for the cleaning and storing of a contact lens that can be used once and then be discarded.

5 It is yet another object of the present invention to provide a contact lens pouch prefilled with a contact lens care solution for the cleaning and storing of a contact lens that is equipped with a resealable top such that the pouch may be opened to accept a contact lens and then be resealed to achieve a fluid-tight seal.

10 It is still another object of the present invention to provide a contact lens pouch prefilled with a contact lens care solution for the cleaning and storing of a contact lens that is equipped with a plastic inter-locking device such that the pouch may be opened to accept a contact lens and then be resealed.

#### Summary of the Invention

15 In accordance with one aspect of the present invention, a contact lens container prefilled with contact lens treatment solutions that can be used either once or several times by utilizing a recloseable and resealable top is provided.

20 In the preferred embodiment, a contact lens container prefilled with contact lens treatment solutions and constructed with a base member having at least one compartment, and more preferably two compartments, is provided with a laterally projected flange around the perimeter of the base member, a reusable adhesive is deposited on the projecting flange, and a cover sheet member extending at least across the full length and width of the compartments is releasably united to the base member at the flange by the  
25 adhesive and thus forming a fluid-tight seal. The layer of adhesive is chosen such that it is capable of uniting the cover sheet member and the base member at the flange repeatedly after several uniting and releasing operations between the two members.

30 In an alternate embodiment, a container is provided with a sliding cover equipped with means to slidably engage the laterally projecting flange on the base member and extending across the full length and width of the base member so that a fluid-tight seal between the base member and the sliding cover can be obtained when the cover is in a fully closed position. A flexible cushion liner is used inside the cover member to provide a fluid-tight seal.

In accordance with another aspect of the present invention, a contact lens pouch quipped with a resealable top and prefilled with a contact lens care solution that can be used to clean, disinfect, rinse and store a contact lens once and then be discarded is provided.

5 In the preferred embodiment, a contact lens pouch prefilled with a contact lens care solution is constructed with a resealable top equipped with a plastic inter-locking device. The contact lens pouch may be prefilled at the factory with a contact lens care disinfection solution and then be marketed at a pharmaceutical outlet. The contact lens wearer opens the resealable top to  
10 deposit a contact lens in the pouch for the cleaning, disinfecting and storing of the lens and then reseals the top. After a predetermined period of time necessary to disinfect the lens, the wearer opens the pouch again, removes and rinses the contact lens and places it in the eye. The pouch is then discarded. The pouch is flexible and can be carried around by the wearer  
15 conveniently in a pocket or in a purse. This preferred embodiment is most suitably used with an "all-in-one" type of contact lens care solution which accomplishes the functions of cleaning, disinfecting, storing, rinsing and lubricating a contact lens all by a single solution.

In a first alternate embodiment, a contact lens pouch may be  
20 constructed with two compartments with a fluid-tight seal therein between. In the first compartment, a resealable top is provided such that the contact lens cleaning, disinfecting, and storing functions can be carried out by the wearer in the same way as that described in the preferred embodiment. The second compartment, which is juxtaposed to the first compartment, is  
25 equipped with a non-resealable, perforated tear-line at the top. This second compartment contains a solution for rinsing and lubricating the contact lens. A suitable solution is a saline solution. After a contact lens wearer disinfected a contact lens in the first compartment, the contact lens is removed from the pouch and placed on the palm of the wearer's hand. By  
30 tearing along the tear-line at the top of the second compartment, the rinse solution can be poured onto the contact lens to complete the rinsing operation. The lens can then be installed into the eye.

This embodiment is more suitably used in an application where a solution for cleaning and disinfecting and a separate solution for rinsing and  
35 lubricating are used.

- 5 -

In a second alternate embodiment, a pouch that has three separate compartments may be constructed. Each of the first two compartments are equipped with a resealable top designed to store a left eye contact lens and a right eye contact lens, respectively. The third compartment which contains a rinsing solution is equipped with a non-resealable tear-line at the top for opening. The rinsing solution in the third compartment can be used to rinse both the left eye contact lens and the right eye contact lens after the two lenses are cleaned and disinfected in the first and the second compartment, respectively.

The present invention is further directed to a method of using a contact lens pouch equipped with a resealable top and prefilled with a contact lens care solution to clean, disinfect, store, and rinse contact lenses. The pouch is flexible and can be carried around by the contact lens wearer conveniently and can be used once and then be discarded.

#### Brief Description of the Drawings

Other objects, features and advantages of the present invention will become apparent upon consideration of the specification and the appended drawings, in which

FIG. 1 is a schematic showing the preferred embodiment wherein a cover sheet member is partially peeled back exposing the base member and the compartments.

FIG. 2 is a cross-sectional view taken along 2-2 in FIG. 1 showing the wrap-around arrangement of the cover sheet member at the rear flange of the base member.

FIG. 3 is a schematic showing a variation of the preferred embodiment in which only half of the cover sheet member for one compartment is peeled back.

FIG. 4 is a schematic showing the alternate embodiment in which a sliding cover is partially sealing the top of a base member.

FIG. 5 is a cross-sectional view taken along 5-5 in FIG. 4 showing the sliding cover member equipped with the slidingly engaging means and the flexible liner sealing means.

FIG. 6 is a schematic view of the preferred embodiment wherein the contact lens pouch is equipped with a resealable top.

- 6 -

FIG. 7 is an enlarged cross-sectional view of FIG. 6 taken along line A-A.

FIG. 8 is a schematic view of a first alternate embodiment wherein two compartments are provided.

5        FIG. 9 is a schematic view of a second alternate embodiment wherein three compartments are provided.

**Detailed Description of the Embodiments**

Referring initially to FIG. 1, wherein a schematic view of container 10 having a base member 14 and a partially peeled back cover sheet member 18 is shown. The base member 14 has two compartments 20 and 22 and a partition 24 therein between. A pair of contact lenses 12 are shown in the compartments. Lens care solution, either the same or different, are filled into compartments 20 and 22. It is also possible that the base member 14 contains only one compartment and therefore filled with only one solution. It should also be appreciated that other alternatives to solution such as powders, pills, etc., may be suitably used in compartments 20 and 22. The compartments 20 and 22 may be suitably marked left and right by molded-in symbols such that lenses for the left eye and for the right eye may be appropriately placed in each compartment without confusion.

20        The cover sheet member 18 extends at least across the full length and width of the two compartments 20 and 22 and covers the flange 26. The laterally projecting flange 26 should have a suitable width such that adequate adhesion between the cover sheet member 18 and flange 26 may be obtained by the adhesive layer 28 deposited on flange 26. It should be noted that the adhesive layer 28 covers most of the flange area 26 around the perimeter of the compartments 20 and 22 including the center flange area 30.

25        A cross-sectional view taken along section 2-2 in FIG. 1 is shown in FIG. 2. It should be noted that the cover sheet member 18 is wrapped around the rear flange 32 forming a rear edge wrap 34. This rear edge wrap 34 at the rear flange 32 prevents the user from accidentally peeling the cover sheet member 18 completely off the base member 14.

30        FIG. 3 shows a slight variation from the preferred embodiment in FIG. 1. It is seen that the cover sheet member 18 has a perforated line 36 along the center of the sheet member overlapping the center flange 30 of the base member 14. The perforated line 36 facilitates the tearing of the cover sheet

35

- 7 -

member 18 along the center such that one side of the cover sheet member 18 may be peeled back from the base member 14 independently of the other side. This enables the user to use a single compartment at a time without opening and possibly contaminating the other compartment.

5           The base member 14 which may alternately contain one, two, three or more compartments, can be suitably injection molded of plastic materials or thermoformed from extruded plastic sheets. A suitable plastic material may be polypropylene, polyethylene, high density polyethylene, ultra high molecular weight polyethylene, polyamide, ABS, polystyrene, maleic  
10   anhydride modified polystyrene and polycarbonate. The material should be capable of being sterilized at 120° C. without substantial loss (preferably not more than 20%) of its physical properties of dimensional stability, warpage, and shrinkage. The plastic material should also have low water and vapor permeability to prevent the evaporation of the lens treatment solution. The  
15   plastic material should not be permeable to bacteria in order to avoid contamination.

          The cover sheet member 18 may be a film made of a plastic material that has small elongation upon stretching, or a metal foil that has a plastic coating on the side facing the solution, or a laminated metal foil/plastic film.  
20   The elastic material or the metal foil should have chemical resistance to those chemicals that are normally found in lens care solutions.

          The adhesive layer 28 used on flange 26 should be selected such that it is capable of providing a fluid-tight seal between cover sheet member 18 and base member 14, and furthermore, of providing a fluid-tight seal after  
25   repeated uniting and releasing between the two members. This is to ensure that the cover sheet member 18 after being peeled off can be reclosed and resealed on top of the base member 14 such that lens container 10 may be used several times before it is discarded. We believe that a suitable adhesive for this purpose may be a pressure-sensitive type adhesive such as those of  
30   polybutadiene, polyisoprene, natural rubber, nitrile rubber, epoxy-nylon, nitrile-phenolic, neoprene-phenolic, and vinyl-phenolic. Other closure means not using adhesives such as a zip-lock type of arrangement may also be used so long as a fluid-tight seal can be obtained. A suitable thickness for the adhesive layer may be any thickness between about 0.0001 inches to about  
35   0.125 inches.

According to the present invention, a method of using a container for holding contact lenses and contact lens treatment solutions, can be carried out by first providing a base member 14 having at least two compartments 20 and 22 each having a predetermined length and width situated next to each other with a partition 24 therein between and a laterally projecting flange 26 and 30 around the perimeter of the compartments. A layer of suitable adhesive having a sufficient thickness is then deposited on flange 26 and 30. The compartments are then filled with at least one contact lens treatment solution such that one solution is filled into each compartment. The cover sheet member 18 is then united to the base member 14 by the adhesive layer 28 forming a fluid-tight seal. The layer of adhesive 28 is capable of uniting the cover sheet member 18 and the base member 14 and forming a fluid-tight seal even after repeated uniting and releasing between the two members.

FIG. 4 shows one of the alternate embodiments of the present invention in which a sliding cover member 40 is utilized to provide a fluid-tight seal on base member 14. A cross-sectional view taken along section 5-5 in FIG. 4 is shown in FIG. 5. It should be noted that sliding cover member 40 is equipped with a stop 44 at the rear edge 42. This is shown in the break-away view in FIG. 4. The stop 44 provides a convenient guide in closing the sliding cover member 40 on the base member 14 along flange 26 such that it can not accidentally slide off base member 14.

The sliding cover member 40 is equipped with sliding engagement means 46 and 48 at each end of the cover member which provides a spring closure action on flange 26 of the base member 14 so that cover member 40 is pressed tightly against flange 26 providing a fluid-tight seal. A flexible cushion liner 50 is used inside the sliding cover member 40 to facilitate the fluid-tight seal. This flexible cushion liner can suitably be made of an elastomeric material such as neoprene rubber, nitrile rubber, urethane rubber, etc., a foam material such as polyurethane foam, polyester foam, neoprene foam, etc., or any other flexible and pliable sheeting material. It should have adequate chemical resistance to chemicals that are normally found in lens treatment solutions for cleaning, disinfecting, rinsing, and wetting contact lenses.

- 9 -

The sliding cover member 40 may be suitably molded of a plastic material such as those used for base member 14.

FIG. 4 shows that sliding cover member 40 is slid off half way on base member 10 such that half of the opening for compartments 20 and 22 are exposed. It is possible to mark the two compartments each as left and right to facilitate the use for the left eye lens and the right eye lens.

It should be noted that the sliding cover member 40 described in the alternate embodiment is only one of the preferred means for achieving a fluid-tight seal on the base member 14. Other types of closure means including, but not limited to, a press-on lid should also function satisfactorily.

To further facilitate the use of the present invention, a plurality of lens containers may be packaged together in strips in which the containers are connected to each other along the sides that can be easily separated. A user may suitably choose a strip package for weekly, bi-weekly or monthly usage and carry them conveniently in a ready-to-use condition.

A second aspect of the invention is shown initially in FIG. 6 wherein a schematic view of a contact lens pouch 60 which has a resealable top 62 is shown. The resealable top 62 is equipped with a resealable sealing means 70. In this preferred embodiment, the resealable sealing means 70 is a plastic inter-locking device. An enlarged cross sectional view of this plastic inter-locking device is shown in FIG. 7. This plastic inter-locking device is similar to that used in food storage bags commonly known as Zip-Lock bags.

The pouch 60 is prefilled with a lens care solution 64 before being marketed to the consumers. A suitable volume for such solution is approximately 4 to 10 ml.

The pouch 60 can be made with any suitable plastic material that is substantially flexible. The plastic material is first extruded into sheets and then thermoformed into bags. The plastic inter-locking device is frequently bonded to the sheets in a secondary operation. It can also be extruded into the sheets in the plastic extrusion process.

The plastic material should be capable of being sterilized at 120° C without substantial loss of its physical properties of dimensional stability, warpage, and shrinkage. The plastic material should have low water and vapor permeability to prevent the evaporation and loss of the lens care

s lution. The plastic material should not be permeable to bacteria and oxygen in order to avoid contamination and to keep the efficacy of the solution.

A plastic material that is inert to most lens care solutions is polyethylene. A polyethylene sheet, in a very thin form, is not a good barrier  
5 to oxygen and to light transmission. Preferably, polyethylene is used by incorporating a filler to change its optical clarity such that light transmission can be reduced.

Polyethylene thin film may also can be laminated to a thin metal foil, such as an aluminum foil. The laminated film can be used as a pouch material  
10 with the polyethylene side facing the solution. The metal foil functions to block oxygen diffusion and light transmission. The plastic inter-locking device can be extruded of a high density polyethylene material. In such case, it can be laminated to the polyethylene film in a separate manufacturing process.

15 In the preferred embodiment which illustrates a single compartment, an "all-in-one" type of lens care solution capable of accomplishing the functions of cleaning, disinfecting, storing, rinsing and lubricating all by a single solution is most suitably used. One of such solutions is available under the tradename of Complete® supplied by Allergan, Inc. However, it should be appreciated  
20 that other lens care solutions may also be suitably used in the pouch shown in FIG. 1 to accomplish only a single function of lens regimen, i.e., cleaning, disinfecting, rinsing, or lubricating.

It should be noted that the pouch shown in FIG. 6 containing a prefilled lens care solution may be reused instead of being discarded after one use.  
25 However, the contact lens wearer should avoid contaminating the solution and thus losing its sterility.

Instead of using a polyethylene/metal foil laminate, it is also possible to use a polyethylene film that has metal particles deposited on it by either a vapor deposition process or by a metal thermal spray process. Only a very  
30 thin film of metal is required to minimize the oxygen diffusion and the light transmission through the polyethylene film.

In FIG. 7, an enlarged cross-sectional view of the plastic inter-locking device 70 is shown. A male portion 66 of the inter-locking device is shown in a juxtaposed position to a female portion 68. When pressure is applied to 66  
35 and 68 by pressing the films 72 and 74 together, a fluid-tight seal is

- 11 -

accomplished by the engagement of the male portion 66 into the female portion 68.

In a method of using the pouch 60 in FIG. 6, a contact lens wearer opens the pouch by disengaging the plastic inter-locking device 70 at the top 62 and deposits a contact lens into the pouch. The pouch is then resealed by engaging the plastic inter-locking device 70 to achieve a fluid-tight seal. After the contact lens is deposited in pouch 60 for a period of time, i.e., a generally recommended minimum time period for disinfecting is four hours, the plastic inter-locking device 70 is opened and the contact lens is removed from pouch 60 and after rinsing, placed in the eye.

In a first alternate embodiment, as shown in FIG. 8, a contact lens pouch 76 is provided with two compartments 86 and 90. A fluid-tight seal 88 is formed in between the two compartments 86 and 90 during the thermoforming process. Compartment 86 is equipped with a plastic inter-locking device 84 at the top. Compartment 86 is also prefilled with a contact lens cleaning and disinfecting solution 82. Compartment 90 is equipped with a perforated tear-line 78 at the top. A rinsing solution 80 is prefilled in compartment 90. A suitable volume of such rinsing solution is approximately 2 to 4 ml. The rinsing solution 80 can be accessed by tearing along tear-line 78 to open the compartment and then pouring the solution onto a contact lens after the lens has been suitably disinfected. Tear-line 78 is perforated for easy tearing and cannot be resealed once it is torn.

The material used for compartment 86 and compartment 90 in pouch 76 is similar to that used in pouch 60 described in the preferred embodiment. A typical rinsing solution for filling compartment 90 is a saline solution.

In a method of using the contact lens pouch shown in Fig. 8, a contact lens is first deposited in compartment 86 which contains the cleaning, disinfecting, and storing solution for a sufficient length of time to clean and disinfect the lens. Compartment 86 is then reopened at the plastic inter-locking device 84 and the contact lens is removed. Tear-line 78 at the top of compartment 90 is then torn open and the rinsing solution is poured onto the contact lens for the final rinsing before the lens is put into the eye.

In a second alternate embodiment, as shown in FIG. 9, a contact lens pouch 98 that has three separate compartments is provided. Compartments 92 and 94 are each used to clean, disinfect, and store a left eye contact lens

and a right eye contact lens, respectively. These two compartments are each marked for left or right and are each equipped with a plastic inter-locking device at the top of the compartment. Compartment 96 which is equipped with a tear line at the top is used to hold a rinsing solution.

- 5           A method of using this second alternate embodiment comprises the steps of cleaning and disinfecting the left eye contact lens and the right eye contact lens in compartments 94 and 92, respectively for a sufficient length of time, and then removing the contact lenses from compartments 92 and 94 by opening the plastic inter-locking devices at the top of the compartments.
- 10       The rinse compartment 96 is then opened and the rinsing solution contained therein is poured onto the two lenses for the final rinsing and wetting process before the lenses are inserted into the eyes.

- 15           While this invention has been described in an illustrative manner, it should be understood that the terminology used is intended to be in the nature of words of description rather than of limitation.

- 20           Furthermore, while the invention has been described in terms of a preferred and an alternate embodiment thereof, it is to be appreciated that those skilled in the art will readily apply these teachings to other possible variations of the invention.:

Claims

1. A container for holding contact lenses and contact lens treatment solution comprising:

5 (a) a base member comprising a compartment having a predetermined length and width for holding a contact lens and a laterally projecting flange around the perimeter of said compartment, said compartment being defined by a bottom surface and side wall surfaces extending between said bottom surface and said laterally projecting flange, said compartment being filled with  
10 a contact lens treatment solution;

(b) a layer of adhesive deposited on said flange; and

(c) a cover sheet member extending at least across the full length and width of said compartment and being releasably united to said base member at said laterally projecting flange by said layer of adhesive forming a fluid-tight  
15 seal,

wherein said layer of adhesive is capable of uniting said cover sheet member and said base member at the laterally projecting flange forming said fluid-tight seal after repeated uniting and releasing between said members.

2. The container according to claim 1 wherein the base member is made of  
20 a material capable of being sterilized at 120°C. without substantial loss of its physical properties.

3. The container according to claim 1 wherein the base member is made of a material having low water permeability.

4. The container according to claim 1 wherein the base member is made of  
25 a material not permeable to bacteria.

5. The container according to claim 1 wherein said contact lens treatment solution is selected from the group consisting of a contact lens cleaning solution, a contact lens disinfecting solution, a contact lens rinsing solution and a contact lens wetting solution.  
30

6. A container for holding contact lenses and contact lens treatment solutions comprising:

5 (a) a base member comprising a compartment having a predetermined length and width for holding a contact lens and a laterally projecting flange around the perimeter of said compartment, said compartment being defined by a bottom surface and side wall surfaces extending between said bottom surface and said laterally projecting flange, said compartment being filled with a contact lens treatment solution; and

10 (b) a cover member equipped with integral means to slidably engage said laterally projecting flange on said base member and extending across the full length and width of said compartment to provide a fluid-tight seal for said container so that contact lenses may be deposited into or retrieved from said compartment in said container by the opening and closing of said cover member.

15 7. A container for holding contact lenses and contact lens treatment solutions comprising:

(a) a base member comprising a compartment having a predetermined length and width for holding a contact lens and a laterally projecting flange around the perimeter of said compartment, said compartment being defined by a bottom surface and side wall surfaces extending between said bottom surface and said laterally projecting flange, said compartment being filled with a contact lens treatment solution;

20 (b) a cover member equipped with integral means to slidably engage said laterally projecting flange on said base member and extending across the full length and width of said compartment to provide a fluid-tight seal for said container so that contact lenses may be deposited into or retrieved from said compartment in said container by the opening and closing of said cover member; and

25 (c) a flexible cushion liner sealingly disposed inside said cover member.

30

- 15 -

8. A container for holding contact lenses and contact lens treatment solution comprising:

5 (a) a base member comprising a compartment having a predetermined length and width for holding a contact lens and a laterally projecting flange around the perimeter of said compartment, said compartment being defined by a bottom surface and side wall surfaces extending between said bottom surface and said laterally projecting flange, said compartment being filled with a contact lens treatment solution; and

10 (b) a cover member extending across the full length and width of said compartment, said cover member and said flange of said base member being adapted to coact to form a resealable, fluid-tight seal for said compartment.

9. A method of making a container for holding contact lenses and contact lens treatment solutions comprising the steps of:

15 (i) providing a base member comprising a compartment having a predetermined length and width and a laterally projecting flange around the perimeter of said compartment, said compartment being defined by a bottom surface and side wall surfaces extending between said bottom surface and said laterally projecting flange;

20 (ii) depositing a layer of adhesive of sufficient thickness on said flange;

(iii) filling said compartment with a contact lens treatment solution; and

25 (iv) uniting a cover sheet member extending at least across the full length and width of said compartment to said base member by said layer of adhesive forming a fluid-tight seal, said layer of adhesive capable of uniting said cover sheet member and said base member forming said fluid-tight seal after repeated uniting and release between said members.

- 16 -

10. A method of making a container for holding contact lenses and contact lens treatment solutions comprising the steps of:

- (i) providing a base member comprising a compartment having a predetermined length and width and a laterally projecting flange around the perimeter of said compartment, said compartment being defined by a bottom surface and side wall surfaces extending between said bottom surface and said laterally projecting flange;
- (ii) filling said compartment with a contact lens treatment solution;
- (iii) providing a cover member equipped with integral means to slidably engage the laterally projecting flange on said base member, said cover member is sufficient in size to extend across the full length and width of said compartment; and
- (iv) slidably engaging said cover member with said laterally projecting flange on said base member so that a fluid-tight seal is obtained when said cover member is placed in a fully closed position on said base member.

11. A method of making a container for holding contact lenses and contact lens treatment solutions comprising the steps of:

- (i) providing a base member comprising a compartment having a predetermined length and width and a laterally projecting flange around the perimeter of said compartment, said compartment being defined by a bottom surface and side wall surfaces extending between said bottom surface and said laterally projecting flange;
- (ii) providing a cover member extending across the full length and width of said compartment, said cover member and said flange of said base member being adapted to coact to form a resealable, fluid-tight seal for said compartment;
- (iii) filling said compartment with a contact lens treatment solution; and
- (iv) forming said resealable, fluid-tight seal for said compartment between said cover member and said flange of said base member.

12. A flexible resealable pouch prefilled with a contact lens care solution for cleaning and storing a contact lens.

13. A resealable pouch according to claim 12 wherein said pouch comprises a resealable top equipped with resealable sealing means for sealing said top.

14. A resealable pouch according to claim 13 wherein said resealable sealing means is a plastic inter-locking device.

15. A flexible resealable pouch having at least one compartment prefilled with a contact lens care solution for the cleaning and storing of a contact lens comprising:

- (a) a top portion equipped with a plastic inter-locking device for achieving a fluid-tight seal; and
- (b) a bottom portion connected to and in fluid communication with said top portion for containment of said contact lens and said contact lens care solution.

16. A resealable pouch according to claim 15 wherein said pouch comprises two compartments juxtaposed to each other with a fluid-tight seal therein between.

17. A resealable pouch according to claim 11 wherein said pouch is made of a thermoplastic material.

18. A resealable pouch according to claim 17 wherein said thermoplastic is polyethylene.

19. A resealable pouch according to claim 11 wherein said pouch is made of a laminated film of a thermoplastic and a metal foil.

20. A method of using a resealable pouch prefilled with a contact lens care solution for storing a contact lens, comprising the steps of:

- (i) providing a pouch prefilled with a contact lens care solution and equipped with a resealable sealing means;
- (ii) disengaging said sealing means and depositing a contact lens in said pouch;
- (iii) engaging said sealing means to effect a fluid-tight seal such that said contact lens is soaked in said lens care solution for a sufficient length of time; and
- (iv) disengaging said sealing means and removing said contact lens.

1/2

FIG. 1.

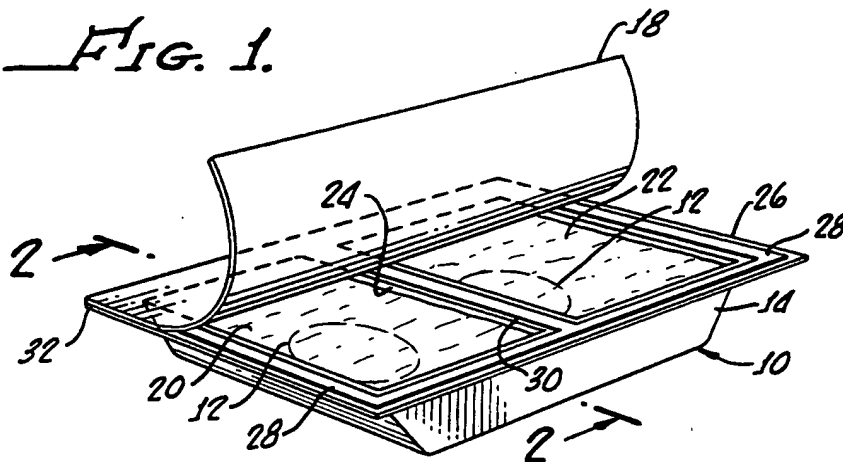


FIG. 2.

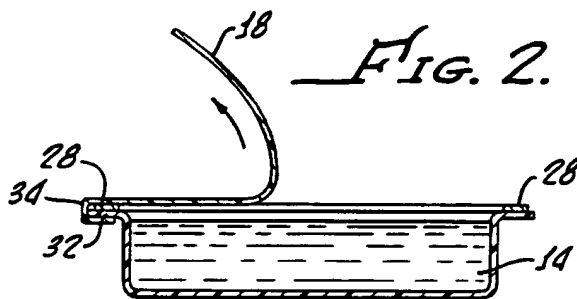


FIG. 3.

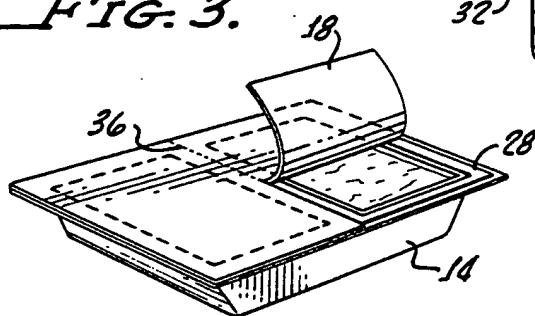


FIG. 4.

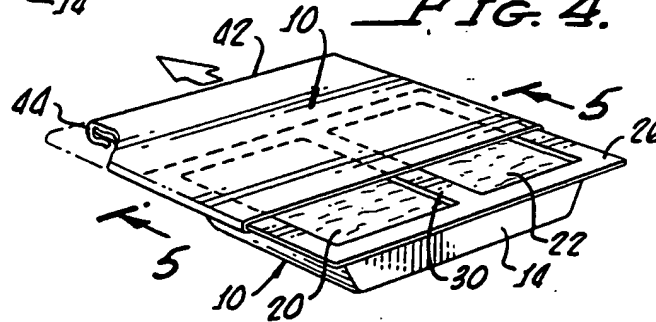
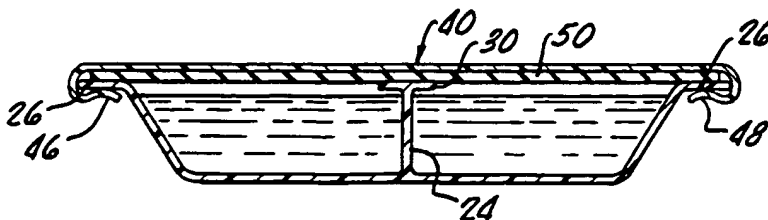
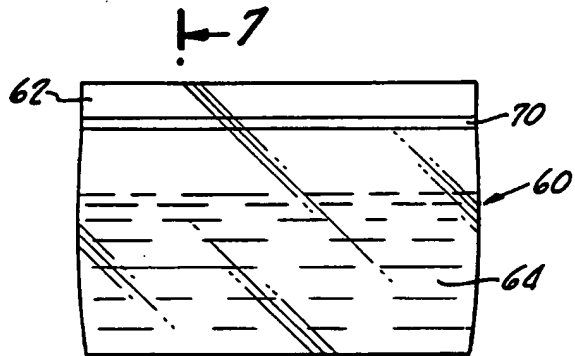


FIG. 5.



2/2



I-I  
FIG. 6.

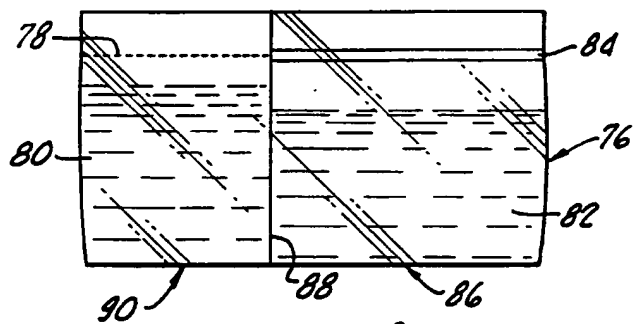


FIG. 8.

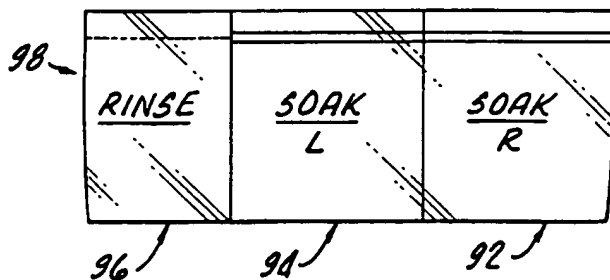


FIG. 9.

FIG. 7.

